

# LMI Analysis for Program Recommendation

# Entrepreneurship & Small Business Management Occupations

# College of San Mateo

## Prepared by the San Francisco Bay Center of Excellence for Labor Market Research

**December 2021**

## Recommendation

Based on all available data, there appears to be an “undersupply” of Entrepreneurship & Small Business Management workers compared to the demand for this cluster of occupations in the Bay region and in the Mid-Peninsula sub-region (San Francisco, San Mateo counties). There is a projected annual gap of about 21,854 students in the Bay region and 6,783 students in the Mid-Peninsula Sub-Region.

## Introduction

This report provides student outcomes data on employment and earnings for TOP 0506.40 Small Business and Entrepreneurship programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at College of San Mateo and in the region.

This report profiles Entrepreneurship & Small Business Management Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for a proposed new program at College of San Mateo.

* **General and Operations Managers (11-1021):** Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Excludes First-Line Supervisors.  
    Entry-Level Educational Requirement: Bachelor’s degree  
    Training Requirement: None  
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 35%
* **Administrative Services and Facilities Managers (11-3011):** Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, facilities planning and maintenance, custodial operations, and other office support services. Medical records administrators are included in “Medical and Health Services Managers” (11-9111). Excludes “Purchasing Managers” (11-3061).  
    Entry-Level Educational Requirement: Bachelor’s degree  
    Training Requirement: None  
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 56%
* **Project Management Specialists and Business Operations Specialists, All Other (13-1198):** All business operations specialists not listed separately.  
    Entry-Level Educational Requirement: Bachelor’s degree  
    Training Requirement: None  
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 22%
* **First-Line Supervisors of Retail Sales Workers (41-1011):** Directly supervise and coordinate activities of retail sales workers in an establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.  
    Entry-Level Educational Requirement: High school diploma or equivalent  
    Training Requirement: None  
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 38%
* **First-Line Supervisors of Non-Retail Sales Workers (41-1012):** Directly supervise and coordinate activities of sales workers other than retail sales workers. May perform duties, such as budgeting, accounting, and personnel work, in addition to supervisory duties.  
    Entry-Level Educational Requirement: High school diploma or equivalent  
    Training Requirement: None  
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 30%

## Occupational Demand

**Table 1. Employment Outlook for Entrepreneurship & Small Business Management Occupations in Bay Region**

| **Occupation** | **2020 Jobs** | **2025 Jobs** | **5-yr Change** | **5-yr % Change** | **5-yr Total Openings** | **Annual Openings** | **25% Hourly Earning** | **Median Hourly Wage** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| General and Operations Managers | 74,266 | 78,126 | 3,860 | 5% | 38,421 | 7,684 | $49 | $95 |
| Administrative Services and Facilities Managers | 12,462 | 13,077 | 615 | 5% | 6,423 | 1,285 | $47 | $82 |
| Project Management Specialists and Business Operations Specialists, All Other | 71,736 | 76,237 | 4,501 | 6% | 43,532 | 8,706 | $37 | $71 |
| First-Line Supervisors of Retail Sales Workers | 29,850 | 28,150 | -1,700 | -6% | 16,845 | 3,369 | $16 | $43 |
| First-Line Supervisors of Non-Retail Sales Workers | 8,445 | 8,347 | -98 | -1% | 4,386 | 877 | $27 | $59 |
| **Total** | **196,759** | **203,937** | **7,178** | **4%** | **109,607** | **21,921** |  |  |
| Source: EMSI 2021.3 | | | | | | | | |

**Bay Region includes:** Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Entrepreneurship & Small Business Management Occupations in Mid-Peninsula Sub-region**

| **Occupation** | **2020 Jobs** | **2025 Jobs** | **5-yr Change** | **5-yr % Change** | **5-yr Total Openings** | **Annual Openings** | **25% Hourly Earning** | **Median Hourly Wage** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| General and Operations Managers | 22,142 | 23,934 | 1,791 | 8% | 12,354 | 2,471 | $53 | $102 |
| Administrative Services and Facilities Managers | 3,664 | 3,937 | 273 | 7% | 2,017 | 403 | $51 | $88 |
| Project Management Specialists and Business Operations Specialists, All Other | 23,190 | 25,267 | 2,076 | 9% | 14,967 | 2,993 | $40 | $74 |
| First-Line Supervisors of Retail Sales Workers | 6,025 | 5,449 | -576 | -10% | 3,311 | 662 | $19 | $46 |
| First-Line Supervisors of Non-Retail Sales Workers | 2,328 | 2,419 | 91 | 4% | 1,341 | 268 | $30 | $61 |
| **Total** | **57,349** | **61,006** | **3,657** | **6%** | **33,990** | **6,797** |  |  |
| Source: EMSI 2021.3 | | | | | | | | |

**Mid-Peninsula Sub-Region includes:** San Francisco, San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Dec 2020 - Nov 2021)**

| **Occupation** | **Bay Region** | **Mid-Peninsula** |
| --- | --- | --- |
| First-Line Supervisors of Retail Sales Workers | 25,508 | 5,834 |
| General and Operations Managers | 23,491 | 10,416 |
| Administrative Services Managers | 4,961 | 1,928 |
| First-Line Supervisors of Non-Retail Sales Workers | 2,962 | 892 |
| Online Merchants | 1,211 | 537 |
| Security Management Specialists | 973 | 314 |
| Business Continuity Planners | 595 | 238 |
| Business Operations Specialists, All Other | 289 | 99 |
| Energy Auditors | 242 | 68 |
| Sustainability Specialists | 158 | 73 |
| Source: Burning Glass | | |

**Table 4a. Top Job Titles for Entrepreneurship & Small Business Management Occupations for latest 12 months (Dec 2020 - Nov 2021) Bay Region**

| **Title** | **Bay** | **Title** | **Bay** |
| --- | --- | --- | --- |
| Store Manager | 1,730 | Shift Supervisor | 313 |
| Assistant Store Manager | 1,652 | Facilities Manager | 302 |
| Operations Manager | 1,330 | Shift Lead | 299 |
| General Manager | 1,012 | Director Of Operations | 290 |
| Key Holder | 559 | Operations Coordinator | 286 |
| Operations Supervisor | 459 | Facilities Coordinator | 278 |
| Retail Store Manager | 455 | Chief Of Staff | 274 |
| Assistant Manager | 420 | District Manager | 272 |
| Operations Assistant Manager | 330 | Product Owner | 242 |
| Source: Burning Glass | | | |

**Table 4b. Top Job Titles for Entrepreneurship & Small Business Management Occupations for latest 12 months (Dec 2020 - Nov 2021) Mid-Peninsula Sub-Region**

| **Title** | **Mid-Peninsula** | **Title** | **Mid-Peninsula** |
| --- | --- | --- | --- |
| Operations Manager | 358 | Operations Supervisor | 100 |
| Store Manager | 334 | Director Of Operations | 91 |
| General Manager | 294 | Operations Coordinator | 88 |
| Assistant Store Manager | 223 | District Manager | 85 |
| Chief Of Staff | 177 | Retail Store Manager | 81 |
| Key Holder | 136 | Assistant Manager | 79 |
| Facilities Coordinator | 117 | Business Operations Manager | 67 |
| Facilities Manager | 111 | People Operations Manager | 62 |
| Product Owner | 103 | Associate Director | 58 |
| Source: Burning Glass | | | |

## Industry Concentration

**Table 5. Industries hiring Entrepreneurship & Small Business Management Workers in Bay Region**

| **Industry – 6 Digit NAICS (No. American Industry Classification) Codes** | **Jobs in Industry (2020)** | **Jobs in Industry (2025)** | **% Change (2020-25)** | **% Occupation Group in Industry (2020)** |
| --- | --- | --- | --- | --- |
| Custom Computer Programming Services | 7,763 | 9,066 | 17% | 4% |
| Internet Publishing and Broadcasting and Web Search Portals | 6,457 | 8,025 | 24% | 3% |
| Corporate, Subsidiary, and Regional Managing Offices | 6,596 | 6,026 | -9% | 3% |
| Electronic Computer Manufacturing | 5,293 | 5,878 | 11% | 3% |
| Software Publishers | 4,481 | 5,274 | 18% | 2% |
| Local Government, Excluding Education and Hospitals | 4,844 | 5,050 | 4% | 2% |
| Computer Systems Design Services | 4,162 | 4,579 | 10% | 2% |
| Supermarkets and Other Grocery (except Convenience) Stores | 4,673 | 4,496 | -4% | 2% |
| Federal Government, Civilian, Excluding Postal Service | 4,382 | 4,355 | -1% | 2% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) | 3,542 | 3,771 | 6% | 2% |
| Source: EMSI 2021.3 | | | | |

**Table 6. Top Employers Posting Entrepreneurship & Small Business Management Occupations in Bay Region and Mid-Peninsula Sub-Region (Dec 2020 - Nov 2021)**

| **Employer** | **Bay** | **Employer** | **Mid-Peninsula** |
| --- | --- | --- | --- |
| West Coast Convenience Llc | 842 | Gap Inc. | 633 |
| Gap Inc. | 823 | Walmart / Sam's | 294 |
| Target | 779 | Facebook | 288 |
| CVS Health | 647 | West Coast Convenience Llc | 259 |
| Walmart / Sam's | 624 | Uber | 224 |
| Google Inc. | 573 | Doordash | 212 |
| Microsoft Corporation | 555 | Microsoft Corporation | 174 |
| Whole Foods Market, Inc. | 488 | University Of California | 168 |
| Facebook | 441 | Google Inc. | 164 |
| Walgreens Boots Alliance Inc | 433 | Sephora | 150 |
| Source: Burning Glass | | | |

## Educational Supply

There are 13 community colleges in the Bay Region issuing 67 awards on average annually (last 3 years ending 2018-19) on TOP 0506.40 Small Business and Entrepreneurship. In the Mid-Peninsula Sub-Region, there are three (3) community colleges that issued 14 awards on average annually (last 3 years) on this TOP code.

**Table 7. Community College Awards on TOP 0506.40 Small Business and Entrepreneurship in Bay Region**

| **College** | **Subregion** | **Associate** | **Certificate Low** | **Noncredit** | **Total** |
| --- | --- | --- | --- | --- | --- |
| Alameda | East Bay | 0 | 1 | 0 | 1 |
| Canada | Mid-Peninsula | 2 | 1 | 0 | 3 |
| Chabot | East Bay | 5 | 2 | 0 | 7 |
| De Anza | Silicon Valley | 0 | 4 | 0 | 4 |
| Diablo Valley | East Bay | 0 | 4 | 0 | 4 |
| Las Positas | East Bay | 2 | 2 | 0 | 4 |
| Los Medanos | East Bay | 6 | 4 | 0 | 10 |
| Merritt | East Bay | 0 | 3 | 0 | 3 |
| Napa | North Bay | 0 | 1 | 0 | 1 |
| San Francisco Ctrs | Mid-Peninsula | 0 | 9 | 0 | 9 |
| San Jose City | Silicon Valley | 2 | 5 | 0 | 7 |
| Santa Rosa | North Bay | 0 | 10 | 2 | 12 |
| Skyline | Mid-Peninsula | 0 | 2 | 0 | 2 |
| **Total** |  | **17** | **48** | **2** | **67** |
| Source: Data Mart | | | | | |

*Note: The annual average for awards is 2016-17 to 2018-19.*

## Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 21,921 annual openings for the Entrepreneurship & Small Business Management occupational cluster and 67 annual (3-year average) awards for an annual undersupply of 21,854 students. In the Mid-Peninsula Sub-Region, there is also a gap with 6,797 annual openings and 14 annual (3-year average) awards for an annual undersupply of 6,783 students.

## Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0506.40 Small Business and Entrepreneurship**

| **Metric Outcomes** | **Bay All CTE Programs** | **San Mateo All CTE Programs** | **State 0506.40** | **Bay 0506.40** | **Mid-Peninsula 0506.40** | **San Mateo 0506.40** |
| --- | --- | --- | --- | --- | --- | --- |
| Students with a Job Closely Related to Their Field of Study | 73% | 73% | 68% | 62% | N/A | N/A |
| Median Annual Earnings for SWP Exiting Students | $44,575 | $52,943 | $29,675 | $39,182 | $41,898 | N/A |
| Median Change in Earnings for SWP Exiting Students | 30.40% | 31.10% | 24% | 19% | 2% | N/A |
| Exiting Students Who Attained the Living Wage | 52.7% | 49.5% | 43% | 40% | 34% | N/A |
| Source: Launchboard Strong Workforce Program Median of 2016-18. | | | | | | |

## Skills, Certifications and Education

**Table 9. Top Skills for Entrepreneurship & Small Business Management Occupations in Bay Region (Dec 2020 - Nov 2021)**

| **Skill** | **Posting** | **Skill** | **Posting** |
| --- | --- | --- | --- |
| Retail Industry Knowledge | 15,116 | Product Knowledge | 4,618 |
| Customer Service | 13,568 | Onboarding | 4,313 |
| Scheduling | 12,962 | Retail Management | 4,178 |
| Budgeting | 12,722 | Cleaning | 3,964 |
| Sales | 12,374 | Supervisory Skills | 3,954 |
| Store Management | 11,657 | Repair | 3,536 |
| Merchandising | 9,634 | Inventory Management | 3,370 |
| Project Management | 7,705 | Lifting Ability | 3,302 |
| Operations Management | 7,043 | Business Development | 3,122 |
| Staff Management | 6,930 | Performance Management | 3,040 |
| Sales Goals | 6,244 | Product Management | 2,989 |
| Key Performance Indicators (KPIs) | 5,370 | Cash Handling | 2,961 |
| Customer Contact | 5,236 | Business Operations | 2,949 |
| Store Operations | 5,028 | Sales Management | 2,847 |
| Source: Burning Glass | | | |

**Table 10. Certifications for Entrepreneurship & Small Business Management Occupations in Bay Region (Dec 2020 - Nov 2021)**

| **Certification** | **Posting** | **Certification** | **Posting** |
| --- | --- | --- | --- |
| Driver's License | 4,624 | Six Sigma Certification | 171 |
| Project Management Certification | 763 | Certified Information Systems Security Professional (CISSP) | 157 |
| Project Management Professional (PMP) | 446 | Cosmetology License | 151 |
| Pharmacy Technician Certification Board (PTCB) | 390 | OSHA Forklift Certification | 142 |
| Food Handler Certification | 314 | Certified Facility Manager (CFM) | 138 |
| ServSafe | 306 | IT Infrastructure Library (ITIL) Certification | 118 |
| First Aid Cpr Aed | 304 | Food Service Certification | 113 |
| Automotive Service Excellence (ASE) Certification | 238 | Certified Information Systems Auditor (CISA) | 113 |
| Registered Behavior Technician | 229 | Registered Nurse | 111 |
| Security Clearance | 186 | Series 7 | 99 |
| Source: Burning Glass | | | |

*Note: 84% of records have been excluded because they do not include a certification. As a result, the chart above may not be representative of the full sample.*

**Table 11. Education Requirements for Entrepreneurship & Small Business Management Occupations in Bay Region**

| **Education (minimum advertised)** | **Latest 12 Mos. Postings** | **Percent 12 Mos. Postings** |
| --- | --- | --- |
| High school or vocational training | 13,854 | 38% |
| Associate's degree | 1,233 | 3% |
| Bachelor's degree and higher | 21,784 | 59% |
| Source: Burning Glass | | |

## Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

## Sources

O\*Net Online  
Labor Insight/Jobs (Burning Glass)  
Economic Modeling Specialists International (EMSI)  
CTE LaunchBoard www.calpassplus.org/Launchboard/  
Statewide CTE Outcomes Survey  
Employment Development Department Unemployment Insurance Dataset  
Living Insight Center for Community Economic Development  
Chancellor’s Office MIS system

## Contacts

For more information, please contact:

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